

Substitution

$$x + 4y = 26$$

$$x - 5y = -10$$

$$\hookrightarrow x = 5y - 10$$

$(10, 4)$

$$5y - 10 + 4y = 26$$

$x=10$ $q_y=36$
 $y=4$

Substitution

$$3x + y = 18$$

$$4x + 5y = 13$$

$$y = 18 - 3x$$

$$4x + 5(18 - 3x) = 13$$

$$4x + 90 - 15x = 13$$

$$(7, -3)$$

$$-11x = -77$$
$$x = 7$$

$$y = -3$$

Elimination

$$x + 2y = 10$$

$$(x + y = 6) \quad -1$$

$$x + 4 = 6$$

$$-x - y = -6$$

$$x + 2y = 10$$

$$y = 4$$

$x = 2$

$(2, 4)$

Elimination

$$\begin{array}{r} (2x + 3y = 12) \cdot 2 \\ (5x - 2y = 11) \cdot 3 \end{array}$$

$$\begin{array}{r} 4x + 6y = 24 \\ 15x - 6y = 33 \\ \hline 19x = 57 \\ x = 3 \end{array} \quad (3, 2)$$

Elimination

$$\begin{array}{r} (-3x + 5y = 12) \cdot 2 \\ 6x - 10y = -21 \end{array}$$

$$\begin{array}{r} -6x + 10y = 24 \\ 6x - 10y = -21 \\ \hline 0 = 3 \end{array} \quad \text{False statement} \quad \emptyset$$

Elimination

$$\begin{array}{r} (3x + 2y = 9) \cdot -3 \\ 9x + 6y = 27 \end{array}$$

$$\begin{array}{r} -9x - 6y = -27 \\ 9x + 6y = 27 \\ \hline 0 = 0 \end{array}$$

∞ # sol's on the line

HW

p120-121

13, 14, 17, 19, 23, 24, 29, 31, 34, 39,
40, 45-47